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Physical

No. 47.

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Group
Stephen Harris
admitted March 10. 1819

Inaugural Essay
on
the group of Cynancha hirsuta

1777

Stephen H. Davis
admitted March 18. 1809

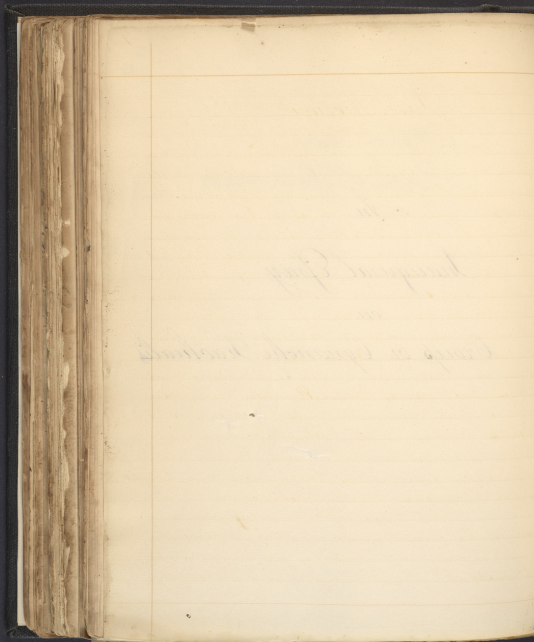
Introduction

An

Inaugural Essay

on

Group or Cynanche Trachealis



Introduction

There is no disease, with which the human system is afflicted, that has more frequently awakened the attention of modern physicians, than Croup or *Cynanche trachealis*. That a disease, so strongly marked in its features, should have eluded particular notice, until the middle of the last Century, is a matter of no little astonishment. — Dr. Hume of Edinburgh has long had the honor, of being the first to investigate the nature of this alarming disease. — "M. Hume has informed us, however, that 'Baillou est le premier qui l'aît designée d'une précise et caractéristique.' Since that period, Millar, Etmüller, Han, Michalis, Eller, Cullen, Frank, Darwin, Des Esarts, Linnæus, Albert, Rush, Scherzer, Cheyne, and others, have each deemed it worthy his particular deliberation; though each have thought proper, to christen it with a distinct and favorite appellation. After having passed under the consideration of such minds, it may be considered presumption in me, to attempt ^{even} shading a glimmering ray to the vast body

of light which has already fallen on this interesting subject. — In inaugural essays it cannot, indeed, be expected, that an inexperienced student, can adduce much, that is either new, or interesting. — He might, it is true, strike into an untraced path, by making an excursion in the fields of fancy and speculation, but such a course, I feel convinced, would not be considered, by the enlightened professors of this university, as either an evidence of judgment, solid medical argument, or accuracy of observation. — Under these impressions I have chosen a practical subject, and in doing so, I have selected the disease with which I am most familiar, and which has most frequently presented itself in practice to me. —

With unaffected diffidence, I submit my humble labours for examination, and can only regret, that it is not more worthy the distinguished university, in which I have had the honor of being educated. —

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Croup, selects for its 'local habitation' either the larynx, or trachea, and is generally defined, to be either a spasmodic or inflammatory affection, of one of those organs.

It sometimes commences with great violence, is rapid in its progress, its symptoms short, its paroxysms rapidly succeed each other, and death soon terminates the painful sufferings of its victim, if its course be not speedily arrested, by the hand of art. - At other times, its march, is slow, its symptoms equivocal, its remissions longer, and death when it does take place, is much more tardy and insidious.

This variety in the symptoms of the disease, has been hitherto supposed to depend on some peculiarity in the state of the system at the time of attack. - M. Astruc of Geneva, has explained it differently, however, and I think more satisfactorily. - He says that the larynx and trachea are endowed with different degrees of irritability, and hence infers, that diseased

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affections of those organs, must be characterised by very opposite symptoms. - By thus attending to the interior character of the disease, he was enabled to discover its precise location. I need not say, that in a practical point of view this knowledge is very interesting.

The ordinary symptoms of the Croup, are a hoarse cough, a sonorous and wheezing respiration, a full and frequent pulse, a swelling and discoloration of the face, and an oppression, which appears to be the effect of a sort of compression, or contraction of the larynx. - These symptoms appear in paroxysms, and these paroxysms, increase in frequency, in duration, and in intensity, as the disease advances.

It commonly attacks in the night and during sleep. - It occasionally appears however, indifferently at all hours of the day.

The intervals, which occur between the first paroxysms, frequently afford a complete remission, but by degrees the remissions become less sensible and at last scarcely perceptible.

One of the most prominent characteristics of this disease, is a peculiar alteration in the sound of the voice; which, has been com-

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passed, by turns, to the cry of a young cock, or of an irritated hen, and to the creaking of certain animals.

When respiration is very difficult, the pulse is hard, small, frequent, and sometimes intermittent; the heart is agitated with violence, and with irregular bounds. the carotid arteries beat with great force, the jugular veins are swelled and extended. - The face at first flushed, becomes by turns, pale, livid, and blueish; the eyes seem to project in their orbits, a cold and clammy sweat covers the head, the patient's strength is prostrated, and at one moment a frightful shewiness steals over his senses, the next, he is awakened by the most painful sense of strangulation.

The true cause of this extraordinary difficulty of respiration, is a spasm of the larynx, produced either by inflammation of the mucous membrane of that organ, or from coagulation of coagulating lymph, on its internal surface. Sometimes this lymph, either by its quantity, consistence, or by the membranous form which it assumes, forms an obstruction to the passage of air, purely mechanical. - Such cases however

The first of these is the fact that the
 world is not a uniform whole, but is
 made up of many different parts, each
 with its own peculiar characteristics.
 These differences are not only in the
 material, but also in the moral and
 intellectual qualities of the people.
 The second fact is that the world is
 not a static entity, but is constantly
 changing and developing. The
 progress of civilization is a continuous
 process, and the world is always
 becoming more and more united.
 The third fact is that the world is
 not a collection of isolated states, but
 is a single, interconnected whole.
 The actions of one state affect the
 actions of all other states, and the
 world is a single, unified system.
 These three facts are the basis of
 the theory of international law, which
 is the study of the rights and
 duties of states in their relations
 with each other.

are very rare, as spasm alone, is the ordinary cause of difficult respiration. — This is not a vain hypothesis, since the perfect cussions, in the worst forms of the disease, prove that it could not so readily arise from any other cause. —

That there is a membrane formed in the trachea of croupal patients, is proved, by the most ample, and respectable testimonials. — Mr. Turre of Geneva, and Mr. Albert of Bremen, have each in the course of a long practice, made a vast number of dissections, and in a majority of cases have found this membranaceous substance. Drs. Rush, Chapman, Archer, with many other respectable physicians of our own country have also borne witness of its existence. — I am not prepared to explain the peculiar kind of action, which takes place in the arteries of the trachea, to form this extraneous body. — Much ingenious speculation, has been urged in explanation of it, but none I think satisfactory. — On a practical point of view, however, it is of but little consequence, since it will afford the physician very little assistance in effecting a cure. — The duration of this disease is very variable. — If it be attacked at the commence-

ment, with suitable remedies, it commonly yields without much difficulty; but if it be abandoned to itself, or the physician be called in too late, it may either carry off the patient in a few hours, or it may be prolonged even to the tenth day.

Examples of a longer duration are extremely rare.

Young children are commonly the subjects of the croup, because of the great predisposition at that age, to inflammation, catarrhs, and to eruptive affections; complaints with which this disease is so frequently complicated. — M.

Albert has remembered that this disease, occurs rarely in the first months of life, very frequent from the first to the seventh year, less frequent from the seventh to twelfth, and very seldom beyond the last age. — Even adults are not, however, entirely exempt from it. — This author cites several examples of this kind. — The inflammation, however, Angina, according to him, is nothing more than croup, modified by force of inflammation, and by a change which takes place in the condition of the organs. — Furthermore the croup of adults, however violent it may appear, is never so dangerous as in children. — To account

for which, the author adduces the following reasons: the first is, that in adults the secretion of lymph is much less abundant; the second, that the irritability of the trachea is less; and the third, that the dimensions of the glottis and larynx are more considerable.

This author has also observed that the croup more frequently attacks boys than girls, and hence infers, that at that period of life, the larynx and trachea are not of the same degree of development in both sexes.

Although I am not prepared to say Mr. Albert's speculations are correct, still I think they carry with them much plausibility, and may conduce, perhaps, to throw some light on the true character of this disease.

Temperature, seasons, places, age, sex, and habits of body, have all an influence in the production of croup. - Cold, and humidity, conduce much to the development of this disease. - It occurs most frequently in autumn, in the winter, and early in the spring, and commonly prevails in low countries, surrounded by mountains, either in the vicinity of lakes, or large rivers.

the first of the month of January 1841
and the first of the month of February 1841
the first of the month of March 1841
the first of the month of April 1841
the first of the month of May 1841
the first of the month of June 1841
the first of the month of July 1841
the first of the month of August 1841
the first of the month of September 1841
the first of the month of October 1841
the first of the month of November 1841
the first of the month of December 1841

Croup is a very prevalent disease on our Atlantic coast, occasionally, no doubt, by the humidity which is constantly escaping from the ocean. Mr. Allist has justly concluded Home to have fallen into a gross error, when he exclusively attributed its prevalence on the sea coast, to the irritating action of the saline particles which were diffused in the surrounding atmosphere. —

All physicians admit that children dispose to the croup; and I have already given the opinion of the observing Allist, with regard to sex. —

There is a continued predisposition in some constitutions to croupal affections. While, however, I feel convinced of the existence of this constitutional peculiarity, I confess myself totally unable to throw the least light on its nature. —

To these general causes, which favour the production of croup, I will add some that are particular, such as sudden transitions from heat to cold, the injudicious custom which has for sometime existed, of clothing children too lightly, and of exposing their heads and arms naked, together with damp rooms, and the

... is a very important matter in the life of
the individual and the community. It is a matter
of the highest importance and one which
should be given the most careful consideration.
The individual should be taught to be
responsible for his own actions and to
be aware of the consequences of his
conduct. This is the first step towards
the development of a good character.
The community should also be taught to
be responsible for the actions of its
members. This is the second step towards
the development of a good society.
The individual and the community are
interdependent and must be taught to
live together in harmony. This is the
third step towards the development of a
good world.

and the inspiration of strong and irritating vapors. - Mr. Albert has several times seen it produced by the last cause. -

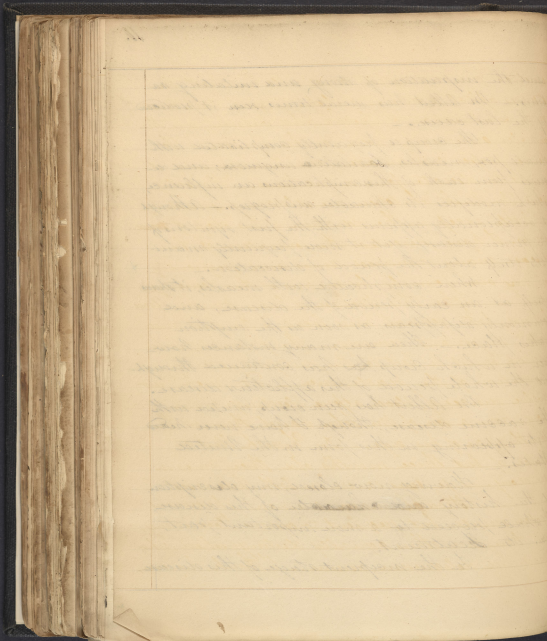
The croup is frequently complicated with small pox, measles, scarlatina anginosa; and receives from each of these complications an influence which modifies its character and progrop. - Although it occasionally appears with the first symptoms of the former disease, yet it more frequently manifests itself about the period of disiccation. -

When complicated with measles, it shows itself at an early period of the disease, and commonly disappears, as soon as the eruption takes place. - There are many instances, however, in which croup has continued throughout the whole period of this afflictious disease. -

Mr. Albert has seen croup, united with the vaccine disease, though I have never heard of its appearing in this form in the United States. -

Having now closed, my description of the history and character of this disease, I shall proceed to a more important part, viz. its treatment.

In the incipient stage of this disease



emetics are indicated, and will in most instances affect a cure. - Sulph. of zinc, tart. Emet. or a combination of Ipecac. and Calomel, are the articles ordinarily used for this purpose. - To derive proper advantage, from this remedy, it ought to operate four or five times. - "Hapless" (says Dr. Rush) "children are seldom injured by a little excess in the operation of this class of medicines. I have prevented the formation of this disease many hundred times and frequently in my own family, by means of this remedy."

After this disease is fully formed, blood-letting, both general and local, is the first and most important remedy. - The quantity to be drawn must be left to the judgment and discretion of the practitioner. - Dr. Rush " drew twelve ounces of blood at one bleeding, in one day, from a son of Mr. John Carroll, then in the fourth year of his age. - Dr. Physick bled a child of but three months old, three times in one day. Life was saved in both these cases."

Although many eminent physicians prefer small, but frequent, to copious blood-letting, yet there are others equally distinguished, who bleed ad deliquium animi. - I think, however,

that the former practice is the safest, and so far as my limited experience has extended, I have found it very successful.

After the system has been reduced by bloodletting, it will be necessary to exhibit emetics, but at small doses, and at regular intervals. - They will have a powerful tendency to overcome spasm, as well to expel the false membrane, or viscid matter from the canal of respiration. -

If these first means are not sufficient to arrest the progress of the disease, it will be necessary to have recourse to blisters, and sinapisms. - They may be applied either to the front or back of the neck, to the breast, or to the extremities, as circumstances may indicate. They act by producing a counter irritation on the surface of the body.

The tepid bath may be used with signal advantage during the first period of this disease. - This is a favorite remedy with the present professors of the institutes and practice of medicine, and I know from my own experience that it

produces the happiest effects. - It diminishes
irritation, relaxes the spasms, and promotes
a determination of the fluids to the surface.

The inspiration of the aqueous vapour
which is exhaled from the bath, may
act too as an emollient and efficacious
dissolvent of the viscous matter in the trachea.

Mr. Albert places great reliance, on the
use of emollient fumigations. - So thoroughly
convinced was he of its utility, that he con-
structed a machine to facilitate its ap-
plication to the seat of the disease. -

In protracted cases Calomel pu-
rges have been used with advantage. -

There is another class of medicines
strongly recommended. - At the head of
these may be ranked the antispasmodics
such as opoponax - Sulphuric ether - ol.
succini, and aqua ammonia. - When the
patient is weak and delicate, or there is
a disposition in the disease to assume a
typhoid form, these remedies may be
used with great success. -

Diaphoretics and expectorants may
be sometimes exhibited as useful auxillia.

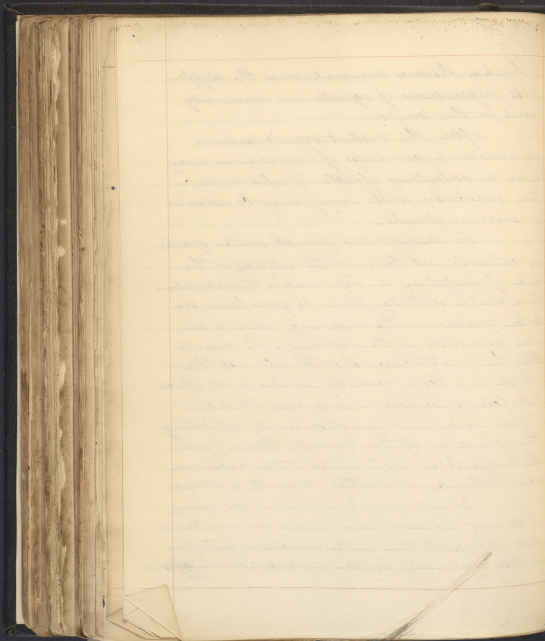
14.
Sulphur - Potome mineral, and the different preparations of squills are commonly used for this purpose.

After the violent symptoms have subsided, a few drops of Laudanum, may have a salutary effect. Garlic or onion tea sweetened with honey, may be used as a common drink.

An anonymous french writer speaks in extravagant terms of the utility of the Juice of Sulphur, in Cynanche trachealis. To a child of three years, he gives from six to ten grains in the morning, and a similar quantity in the evening. He directs that the practitioners should only use that which has been recently made, and which has been preserved in a corked phial.

I have never had an opportunity of testing the efficacy of this remedy, still from the confidence with which it is recommended, I think it worthy at least of a trial.

Before closing my imperfect essay, I cannot refrain from tendering my heartfelt thanks to the distinguished professors of this University, for the signal advantages



which I have derived from them in their
 several branches. — That their future lives
 may be as prosperous and happy, as their
 past has been usefull is the sincere wish
 of their

Obliged Servt.
 The Author

